

Structure of Life (Life Science Unifying Concept B)

All living things are composed of cells. Cells range from very simple to very complex and have structures which perform functions for the organism. Cells and structures can be damaged or fail because of intrinsic failures or disease.

By the end of the grade band:		By the end of the grade band, students know and are able to do everything required in earlier grades and:		By the end of grade band, students know and are able to do everything required in earlier grades and:		By the end of grade band, students know and are able to do everything required in earlier grades and:		
Grades K - 2		Grades 3 - 5		Grades 6 - 8		Grades 9 - 12		
L.2.B	Students understand that living things have identifiable characteristics.	L.5.B	Students understand that living things have specialized structures that perform a variety of life functions.	L.8.B	Students understand that living things are composed of cells, which are specialized in multicellular organisms to perform a variety of life functions.	L.12.B	Students understand that all life forms, at all levels of organization, use specialized structure and similar processes to meet life's needs.	
L.2.B.1	Students know humans and other animals use their senses to know their world. E/S	L.5.B.1	Students know plants and animals have structures that enable them to grow, reproduce, and survive. E/S	L.8.B.1	Students know all organisms are composed of cells, which are the fundamental units of life. E/S	L.12.B.1	Students know cell structures and their functions. E/S	Cells
				L.8.B.2	Students know cells grow, divide, and take in nutrients which they use to provide energy for cell functions. E/S			
				L.8.B.3	Students know some organisms are made of just one cell and that multicellular organisms can consist of thousands to millions of cells working together. E/S			
		L.5.B.2	Students know living things have predictable life cycles. E/S	L.8.B.4	Students know cells combine to form tissues that combine to form organs and organ systems that are specialized to perform life functions. E/S	L.12.B.2	Students know the human body has a specialized anatomy and physiology composed of an hierarchical arrangement of differentiated cells. E/S	Disease
				L.8.B.5	Students know disease can result from defects in body systems or from damage caused by infection. E/S	L.12.B.3	Students know disease disrupts the equilibrium that exists in a healthy organism. E/S	